

## Die Ausbeute der deutschen Chaco-Expedition 1925/26. — Diptera. (Fortsetzung.)

### XXIX. Pipunculidae.

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(Mit 5 Textfiguren).

Only seven specimens of Pipunculidae were obtained by Dr. E. Lindner in the course of this Expedition. These belong to three distinct species, two of which appear to be undescribed, and all are males. The failure to obtain both sexes is particularly unfortunate because the specific differences other than sexual are often very small, so that in many cases it is very difficult to recognise a described species if you have before you only the opposite sex from that described. Even when you have the same sex, recognition is not always easy, because past descriptions seldom include any mention of the more important characters, while when the valuable if small sexual specific differences are described they are very seldom figured (the only really satisfactory way of making them intelligible).

The two new species described below increase the number of known South American species of *Pipunculus* to twenty, and in only three of these have both sexes been recorded.

#### *Pipunculus subjectus* sp. n. ♂.

Belonging to the *zonatus*-group of small dull dark species having no prothoracic fan of bristles, metanotum (or postscutellum) convex without transverse groove, and posteroventral spurs to anterior tibiae, (in this species very minute).

♂. Ocellar triangle small, not long pointed, shining black; eyes touching for space equal to length of frons; frons grey-pilose seen from above but dull blackish from in front; face as wide as front of frons and parallel-sided, silvery seen from above, darker from in front. Occiput dusted greyish, browner above; outstanding hairs of posterior fringe short, whitish.

Antennae (fig. 5d) small, dark, second joint with very short hairs above and below, third joint dark reddish-brown, pointed but not rostrate.

Thorax dull brownish with usual two grey patches in front, and grey notopleural depression; seen from above there are indications of a pair of blackish stripes in front between the grey patches, and a similar side stripe above notopleural depression, but when seen from the side these stripes almost disappear, and front of thorax is more uniformly greyish; humeri yellowish but dusted with grey. Pleurae dusted greyish but patches may appear blackish according to the incidence of light.

Pubescence inconspicuous, short, and brownish, confined on disc to the lines of uniserial dorsocentrals.

Abdomen almost parallel-sided, slightly widest at base of third segment, dull brown with grey hindmargins at sides of segments extending across whole hindmargin on only fifth segment. This fifth segment longest, and longer on right side than

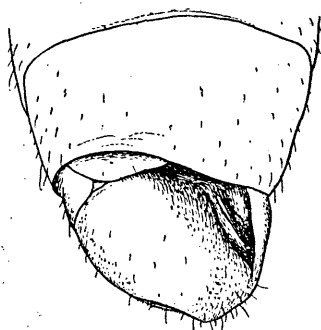


Fig. 1. *Pip. subjectus* ♂. Hypopyg. on left. Hypopygium (fig. 1) seen from above dusted brownish, slightly shining, elongate, rounded at end, with a large deep triangular pit at base on right; it is somewhat dorso-ventrally flattened, with a rather small shallow depression beneath the end at about middle, not visible from above. First segment with 2–3 long black bristles each side, general pubescence short, scattered, brownish.

Legs slightly dusted with grey, coxae black, trochanters reddish-brown, femora black with narrowly yellowish knees, tibiae yellowish with faint dark rings on front and hind pairs, tarsi obscurely yellowish except on last joint. All femora with at least a few small black spinules beneath; only hind femora polished behind. Posteroventral spurs to anterior tibiae very small, inconspicuous, and easily overlooked. Ungues and pulvilli rather long.

Wings almost clear, rather narrow, the brownish stigmal space only slightly longer than next (fourth) costal section, these two together distinctly longer than fifth. Mediastinal vein ending opposite middle crossvein; radial vein ending far beyond

end of discal cell; last section of discal vein straighter than usual. Halteres brown with stem yellow at base of knob.

Length about 2,75 mm.

Four males. Bolivia, Villa Montes, V. 1926.

***Pipunculus simulator* Collin ♂.**

1931. *Pipunculus simulator* Collin, Diptera of Patagonia and S. Chile Part VI. Fasc. 2. p. 56.

The male taken by Dr. Lindner in Bolivia, in general structure and appearance, in colour of antennae, halteres and legs, in armature of femora, and in venation, is so much like the female taken by Mr F. W. Edwards at Ancud, Chiloe Island, South Chile, described by me under the name *simulator* that I am obliged to consider it conspecific. Certainly the third antennal joint is stouter and has a shorter apical prolongation (fig. 5b), thorax and abdomen are browner on disc, small bristles behind anterior tibiae much smaller (none in front of hind tibiae), and wings somewhat narrower, but all these are not unusual sexual differences in species of this genus. It is also slightly smaller, which is unusual, but this may be an individual variation. The sexual differences are noted and figured below.

Ocellar triangle shining black, elongate, sharply pointed in front; eyes touching for distance rather less than length of frons; frons narrow, silvery seen from above but dark from in front; face as wide as front of frons, parallel-sided, very silvery except when viewed from below. Occiput brownish for a short space behind ocellar triangle. Abdomen browner, and in addition with the greyish side markings not continued along hind-margins of segments so far on to disc as in female. It is almost parallel-sided (slightly wider about middle), fifth segment longest and longer on right side than on left. Hypopygium (fig. 2) broader than long, dusted greyish, somewhat truncate at tip owing to a large shallow oval depression which has at its right upper corner a slight prominence; the large, transversely convex, dextro-ventral genital sclerite is yellowish. Ungues and pulvilli shorter than in female, not much longer than last tarsal

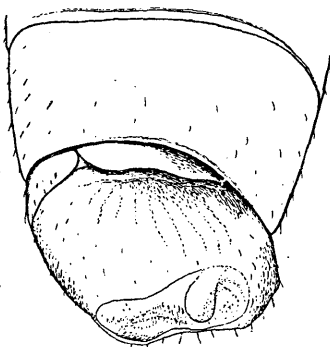


Fig. 2. *Pip. simulator* ♂.  
Hypopygium.

joint. Wings with a very slight brownish tint along costal margin towards tip; fourth costal section perhaps slightly shorter relatively to the third than in female.

Length slightly more than 3 mm.

One male. Bolivia, Villa Montes, V. 1926.

***Pipunculus lindneri* sp. n. ♂.**

A stoutly built species best placed in the *halteratus*-group, having no propleural fan of bristles, no spurs to anterior tibiae, and metanotum not uniformly convex but with indications of a transverse depression or furrow. Antennae small and blunt; legs yellow, hypopygium very large and globular with large yellowish asymmetrical processes beneath.

♂. Ocellar triangle narrow, shining black, continued forwards in a very long point, so that eyes actually touch for a

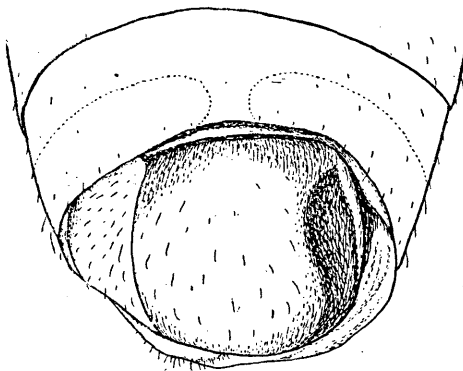


Fig. 3. *Pip. lindneri* ♂. Hypopygium.

short length hardly equal to the short and narrow frons. Face slightly wider than front of frons, parallel-sided; both face and frons silvery. Occiput dull grey, almost silvery at sides and below, slightly brownish on a small area above. Pubescence short and pale. Antennae (fig. 5a) with first two joints dark, second with short hairs above but one or two longer ones below; third short and blunt pointed, translucently yellowish except about base of arista, but microscopic pile gives it a silvery appearance in some lights. Palpi yellow.

Disc of thorax rather dull brownish with faint indications of three darker brown stripes, the usual intrahumeral grey patches on front margin with a rounded blackish patch behind each (which disappears from some points of view), a well defined grey patch at hinder end of notopleural depression; humeri, front margin of scutellum and a small area on hind-margin of thorax at each end of scutellar suture, also greyish. Pleurae and metanotum dusted greyish. Pubescence almost microscopic.

Abdomen rather short and stout, almost parallel-sided;

basal half (less at sides) of first tergite dull brown, sharply contrasted with silvery hindmargin (widest at side), greater part of second tergite greyish except when viewed from behind, third to fifth tergites rather dull brownish, with a grey hindmarginal band (deepest on fifth tergite) interrupted at middle; sides of all tergites entirely greyish. When viewed from behind basal bands darker and in greater contrast to the grey hindmargins. Hypopygium (fig. 3) rounded, as deep as wide, with on left side what appears to be the dusted greyish seventh tergite; middle part brownish above, grey at end, with at right side an almost vertical, slightly S-shaped, dull brownish, shallow groove; ventral part of hypopygium large, yellowish, very asymmetrical, the apparent left lamella large and of peculiar shape (fig. 4). Two or three short black bristles on each side of first tergite, otherwise pubescence brownish, very short, scattered and inconspicuous.

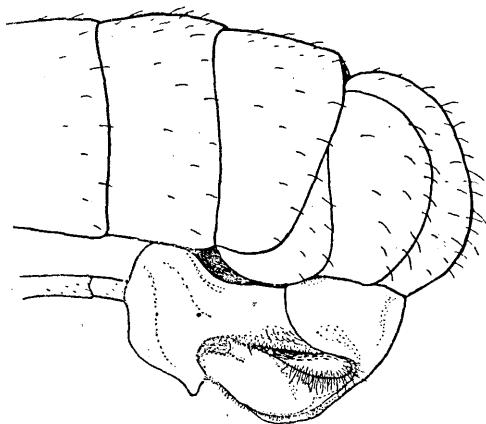


Fig. 4. *Pip. lindneri* ♂. Hypopygium.

Legs yellow, slightly dusted with grey, only last tarsal joint dark; only middle femora with tiny black spinules beneath, and only hind femora shining behind; no spurs to anterior tibiae, and no longer bristles at middle of any tibiae.

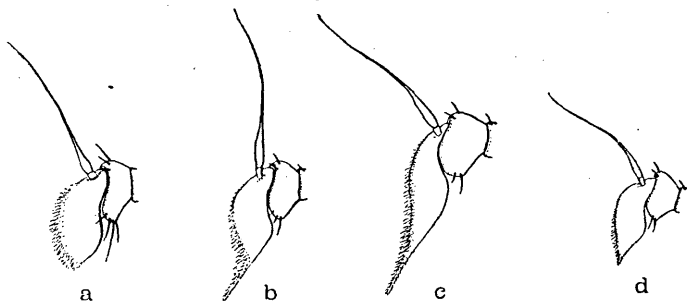


Fig. 5. Antennae of spec. of Pipunculidae.

a) *P. lindneri* ♂, b) *P. simulator* ♂, c) *P. simulator* ♀, d) *P. subjectus* ♂.

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Ungues and pulvilli short, very little longer than last tarsal joint.

Wings practically clear except for brown stigma, third and fourth costal sections subequal in length, middle crossvein rather before basal third of discal cell and opposite end of mediastinal vein; last section of discal vein with a very decided bend; anal cell ending very close to wingmargin. Halteres brownish with middle part of stem pale yellow.

Length about 4,25 *mm*.

Two males. Bolivia, Santa Cruz de la Sierra, Mediomonte, VII. 1926, and Villa Montes, V. 1926.

